Claims

1. Transdermal therapeutic system, in particular a patch, comprising
   - a redetachable protective layer,
   - a pressure-sensitive adhesive reservoir layer and
   - a backing layer with or without a coating of pressure-sensitive adhesive and featuring a unidirectionally, preferably longitudinally, elastic material having an elasticity of at least 20%.

2. Transdermal therapeutic system according to Claim 1, wherein the elasticity is less than 150%.

3. Transdermal therapeutic system according to Claim 1 or 2, wherein the backing layer projects beyond the reservoir on all sides.

4. Transdermal therapeutic system according to one of the preceding claims, wherein a separating layer is arranged between the reservoir layer and the backing layer coated with pressure-sensitive adhesive.

5. Transdermal therapeutic system according to one of the preceding claims, wherein the elastic material has an elasticity in the range 20-80%, with particular preference in the range 40-70%, most preferably in the range 44-56%.

6. Transdermal therapeutic system according to one of the preceding claims, wherein the material of the backing layer is more than 90%, preferably more than 99%, microbially nondegradable.

7. Transdermal therapeutic system according to one of the preceding claims, wherein the backing layer is a woven fabric, a nonwoven fabric or a film.

8. Transdermal therapeutic system according to one of the preceding claims, wherein the backing layer essentially comprises a material selected from the group consisting of polyethylenes, polypropylenes and polyesters, selected in particular from the polyalkylene terephthalates.

9. Transdermal therapeutic system according to Claim 8, wherein the material of the backing layer is a polyterephthalic diester, preferably a polyterephthalic acid diol ester obtainable by the reaction of a starting material selected from ethylene glycol, 1,4-butanediol, 1,4-dihydroxymethyl-cyclohexane, terephthalic acid, isophthalic acid, adipic acid, azelaic acid, sebacic acid, dimethyl terephthalate, dimethyl azelate, dimethyl sebacate, bisphenol A diglycidyl ether, n-decane-1,10-dicarboxylic acid, polyethylene glycol and polybutylene glycol.

10. Transdermal therapeutic system according to one of the preceding claims, wherein the pressure-sensitive adhesive reservoir layer comprises at least one active substance selected preferably from the group consisting of psychopharmaceuticals, analgesics and hormones.

11. Transdermal therapeutic system according to Claim 10, wherein the hormone is oestradiol, the analgesic is buprenorphine and the psychopharmaceutical is a parasympathomimetic.

12. Transdermal therapeutic system according to one of the preceding claims, wherein the pressure-sensitive adhesive reservoir layer contains a water-absorbing polymer.

13. Transdermal therapeutic system according to Claim 12, wherein the water-absorbing polymer is a polyvinylpyrrolidone, preferably one having a molecular weight in the range from 1×10^3 to 2×10^6.

14. Transdermal therapeutic system according to one of the preceding claims, wherein the side of the backing layer which faces outwards has a marking/control element which is differentiated from the remaining area.

15. Transdermal therapeutic system according to Claim 14, where the marking/control element is a coloured marking, preferably in stripe form, or a coloured thread.

16. Transdermal therapeutic system according to one of Claims 14 and 15, wherein the marking/control element which has an elasticity in the range from -20% to +20% relative to the elasticity of the remaining portion of the backing layer.

17. Transdermal therapeutic system according to one of the previous claims, wherein the backing layer has a water vapour permeability of at least 0.1 $g/m^2/h$, preferably from 1 to 20 $g/m^2/h$.

18. Transdermal therapeutic system according to one of the preceding claims, wherein the areal proportion of

pores having a size of ≤ 400 μm^2 is in the range from 10% to 50%.

19. Transdermal therapeutic system according to one of the previous claims, wherein the backing layer has a number of warp threads in the range from 300 to 350, preferably in the range from 310 to 330, and/or a number of weft threads in the range from 100 to 140, preferably in the range from 120 to 130, in each case per 10 cm of unextended fabric.

20. A process for producing the transdermal therapeutic system according to one of Claims 1 to 19, comprising the steps of
- in a presupplied strip-like laminate having an optionally pressure-sensitive adhesive, unidirectionally elastic backing layer and a redetachable protective layer, inserting pressure-sensitive adhesive active substance reservoir sections in sequence in the longitudinal direction,
- separating the backing layer by punching,
- removing the unwanted cut portion of the backing layer and
- then separating the protective layer in the spaces between the active substance reservoir sections.

21. Transdermal therapeutic system according to one of Claims 1 to 19 for use as a multi-day plaster, in particular for the treatment of pain or of drug dependency.

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